

IN THE CLAIMS

1. (currently amended) A first surface optical storage disc, comprising:

a circular substrate having a first principal surface and an opposing second principal surface;

a spiral track of bumps formed on a first portion of the first principal surface, wherein the bumps represent pre-recorded information, the bumps being separated by planar regions;

lands formed on a second portion of the first principal surface, the lands being separated by grooves; and

a phase-change material deposited on the first portion and the second portion of the first principal surface; and

a dielectric layer sputtered over the phase-change material; the first surface disk having no additional layers overlaying the dielectric layer, wherein a combined thickness of the phase change material and the dielectric layer is such that the dielectric layer defines coated bumps and planar regions in the first portion and coated lands and grooves in the second portion, height for the bumps and a height for the lands exceeds a combined thickness of the phase change material and the dielectric layer, and wherein a data density of the first portion is less than a data density of the second portion.

2. (cancelled)

3. (cancelled)

NEPPERSON, KWOK CBBN  
& FIELD LLP

2402 MICHELSON DRIVE  
SUITE 210  
IRVINE, CA 92613  
(949) 752-7040  
FAX (949) 752-7049

4. (previously presented) The disc of Claim 3, wherein the first portion has a data density of approximately 3.8 Mbits/sqmm, and the second portion has a data density of approximately 4.7 Mbits/sqmm.

5. (cancelled)

6. (cancelled )

7. (previously presented) The disc of Claim 1, wherein the phase-change material is an alloy of Sb, In, and Sn.

8. (cancelled)

9. (cancelled)

10. (Original) The disc of Claim 1, wherein the outer diameter of the disc is approximately 50 mm or less.

11. (Original) The disc of Claim 10, wherein the outer diameter of the disc is approximately 32 mm or less.

12. (Original) The disc of Claim 1, wherein the thickness of the disc is approximately 0.6 mm or less.

McPHERSON, KWOK CHEN  
& HEID LLP  
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SUITE 210  
IRVING, CA 92612  
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13. (cancelled)

14. (cancelled)

15. (Original) The disc of Claim 1, wherein the substrate comprises a polycarbonate material.

Claims 16 – 30. (cancelled)

MACPHERSON, KWOK CHEN  
& HEID LLP

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